

1995-07-20 10:00:00

att gtc atg ctg acc gct tat gat tat ccg gca gct aaa ctt gct gaa Ile Val Met Leu Thr Ala Tyr Asp Tyr Pro Ala Ala Lys Leu Ala Glu	20	25	30	96
caa gcg gga gtt gac atg att tta gtc ggt gat tca ctt gga atg gtc Gln Ala Gly Val Asp Met Ile Leu Val Gly Asp Ser Leu Gly Met Val	35	40	45	144
gtc ctc ggc ctt gat tca act gtc ggt gtg aca gtt gcg gac atg atc Val Leu Gly Leu Asp Ser Thr Val Gly Val Thr Val Ala Asp Met Ile	50	55	60	192
cat cat aca aaa gcc gtt aaa agg ggt gcg ccg aat acc ttt att gtg His His Thr Lys Ala Val Lys Arg Gly Ala Pro Asn Thr Phe Ile Val	65	70	75	240
aca gat atg ccg ttt atg tct tat cac ctg tct aag gaa gat acg ctg Thr Asp Met Pro Phe Met Ser Tyr His Leu Ser Lys Glu Asp Thr Leu	85	90	95	288
aaa aat gca gcg gct atc gtt cag gaa agc gga gct gac gca ctg aag Lys Asn Ala Ala Ile Val Gln Glu Ser Gly Ala Asp Ala Leu Lys	100	105	110	336
ctt gag ggc gga gaa ggc gtg ttt gaa tcc att cgc gca ttg acg ctt Leu Glu Gly Gly Glu Val Phe Glu Ser Ile Arg Ala Leu Thr Leu	115	120	125	384
gga ggc att cca gta gtc agt cac tta ggt ttg aca ccg cag tca gtc Gly Gly Ile Pro Val Val Ser His Leu Gly Leu Thr Pro Gln Ser Val	130	135	140	432
ggc gta ctg ggc ggc tat aaa gta cag ggc aaa gac gaa caa agc gcc Gly Val Leu Gly Gly Tyr Lys Val Gln Gly Lys Asp Glu Gln Ser Ala	145	150	155	480
aaa aaa tta ata gaa gac agt ata aaa tgc gaa gaa gca gga gct atg Lys Lys Leu Ile Glu Asp Ser Ile Lys Cys Glu Glu Ala Gly Ala Met	165	170	175	528
atg ctt gtg ctg gaa tgt gtg ccg gca gaa ctc aca gcc aaa att gcc Met Leu Val Leu Glu Cys Val Pro Ala Glu Leu Thr Ala Lys Ile Ala	180	185	190	576
gag acg cta agc ata ccg gtc att gga atc ggg gct ggt gtg aaa gcg Glu Thr Leu Ser Ile Pro Val Ile Gly Ile Gly Ala Gly Val Lys Ala	195	200	205	624
gac gga caa gtt ctc gtt tat cat gat att atc ggc cac ggt gtt gag Asp Gly Gln Val Leu Val Tyr His Asp Ile Ile Gly His Gly Val Glu	210	215	220	672
aga aca cct aaa ttt gta aag caa tat acg cgc att gat gaa acc atc Arg Thr Pro Lys Phe Val Lys Gln Tyr Thr Arg Ile Asp Glu Thr Ile	225	230	235	720
gaa aca gca atc agc gga tat gtt cag gat gta aga cat cgt gct ttc Glu Thr Ala Ile Ser Gly Tyr Val Gln Asp Val Arg His Arg Ala Phe	245	250	255	768
cct gaa caa aag cat tcc ttt caa atg aac cag aca gtg ctt gac ggc				816

Pro	Glu	Gln	Lys	His	Ser	Phe	Gln	Met	Asn	Gln	Thr	Val	Leu	Asp	Gly	
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Leu	Tyr	Gly	Gly	Lys												
275																
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<212> PRT																
<213> Bacillus subtilis																
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Ile	Val	Met	Leu	Thr	Ala	Tyr	Asp	Tyr	Pro	Ala	Ala	Lys	Leu	Ala	Glu	
20							25						30			
Gln	Ala	Gly	Val	Asp	Met	Ile	Leu	Val	Gly	Asp	Ser	Leu	Gly	Met	Val	
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Val	Leu	Gly	Leu	Asp	Ser	Thr	Val	Gly	Val	Thr	Val	Ala	Asp	Met	Ile	
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His	His	Thr	Lys	Ala	Val	Lys	Arg	Gly	Ala	Pro	Asn	Thr	Phe	Ile	Val	
65						70				75			80			
Thr	Asp	Met	Pro	Phe	Met	Ser	Tyr	His	Leu	Ser	Lys	Glu	Asp	Thr	Leu	
85						90					95					
Lys	Asn	Ala	Ala	Ala	Ile	Val	Gln	Glu	Ser	Gly	Ala	Asp	Ala	Leu	Lys	
100						105					110					
Leu	Glu	Gly	Glu	Gly	Val	Phe	Glu	Ser	Ile	Arg	Ala	Leu	Thr	Leu		
115						120				125						
Gly	Gly	Ile	Pro	Val	Val	Ser	His	Leu	Gly	Leu	Thr	Pro	Gln	Ser	Val	
130						135				140						
Gly	Val	Leu	Gly	Gly	Tyr	Lys	Val	Gln	Gly	Lys	Asp	Glu	Gln	Ser	Ala	
145						150				155			160			
Lys	Lys	Leu	Ile	Glu	Asp	Ser	Ile	Lys	Cys	Glu	Glu	Ala	Gly	Ala	Met	
165							170					175				
Met	Leu	Val	Leu	Glu	Cys	Val	Pro	Ala	Glu	Leu	Thr	Ala	Lys	Ile	Ala	
180							185				190					
Glu	Thr	Leu	Ser	Ile	Pro	Val	Ile	Gly	Ile	Gly	Ala	Gly	Val	Lys	Ala	
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Asp	Gly	Gln	Val	Leu	Val	Tyr	His	Asp	Ile	Ile	Gly	His	Gly	Val	Glu	
210							215				220					
Arg	Thr	Pro	Lys	Phe	Val	Lys	Gln	Tyr	Thr	Arg	Ile	Asp	Glu	Thr	Ile	
225						230				235			240			
Glu	Thr	Ala	Ile	Ser	Gly	Tyr	Val	Gln	Asp	Val	Arg	His	Arg	Ala	Phe	
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Pro Glu Gln Lys His Ser Phe Gln Met Asn Gln Thr Val Leu Asp Gly  
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Leu Tyr Gly Gly Lys  
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tac cat tca gag ggc aag tca atc gga ttt gtt ccg acg atg ggg ttt 96  
 Tyr His Ser Glu Gly Lys Ser Ile Gly Phe Val Pro Thr Met Gly Phe  
           20                 25                 30

ctg cat gag ggg cat tta acc tta gca gac aaa gca aga caa gaa aac 144  
 Leu His Glu Gly His Leu Thr Leu Ala Asp Lys Ala Arg Gln Glu Asn  
           35                  40                  45

```

gac gcc gtt att atg agt att ttt gtg aat cct gca caa ttc ggc cct 192
Asp Ala Val Ile Met Ser Ile Phe Val Asn Pro Ala Gln Phe Gly Pro
      50           55           60

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aat gaa gat ttt gaa gca tat ccg cgc gat att gag cgg gat gca gct 240
Asn Glu Asp Phe Glu Ala Tyr Pro Arg Asp Ile Glu Arg Asp Ala Ala
   65          70          75          80

```

ctt gca gaa aac gcc gga gtc gat att ctt ttt acg cca gat gct cat 288  
 Leu Ala Glu Asn Ala Gly Val Asp Ile Leu Phe Thr Pro Asp Ala His  
                   85                  90                  95

```

gat atg tat ccc ggt gaa aag aat gtc acg att cat gta gaa aga cgc 336
Asp Met Tyr Pro Gly Glu Lys Asn Val Thr Ile His Val Glu Arg Arg
          100           105           110

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aca gac gtg tta tgc ggg cgc tca aga gaa gga cat ttt gac ggg gtc 384
Thr Asp Val Leu Cys Gly Arg Ser Arg Glu Gly His Phe Asp Gly Val
          115           120           125

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```

gcg atc gta ctg acg aag ctt ttc aat cta gtc aag ccg act cgt gcc 432
Ala Ile Val Leu Thr Lys Leu Phe Asn Leu Val Lys Pro Thr Arg Ala
    130          135          140

```

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tat ttc ggt tta aaa gat gcg cag cag gta gct gtt gtt gat ggg tta    480
Tyr Phe Gly Leu Lys Asp Ala Gln Gln Val Ala Val Val Asp Gly Leu
145           150           155           160

```

atc agc gac ttc ttc atg gat att gaa ttg gtt cct gtc gat acg gtc 528  
 Ile Ser Asp Phe Phe Met Asp Ile Glu Leu Val Pro Val Asp Thr Val  
                  165                 170                 175